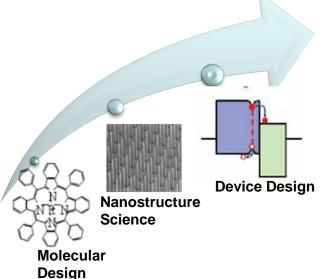


Emerging Materials for Solar Energy Conversion and Solid State Lighting

P. Daniel Dapkus (USC)

The goal of our center is to create low cost, high efficiency solar cells and light emitting diodes (LEDs). Our world renown team will use semiconductor nanotechnology and organic molecular design to produce innovative new materials, coupling with novel device designs will provide key understanding of the fundamental issues controlling performance.





RESEARCH PLAN AND DIRECTIONS

- Increase efficiency and reduce cost of solar cells and LEDs by 10X to create technologies that are cost competitive with the incumbents.
- Develop new understanding of semiconductor nanoscience, organic molecule design, and device design to enable a new generation of low cost, efficient device designs.



